MVL Specifications

Update: 2024-08-26

CAPACITIES	UNITS	MVL-20-SR MVL-20iM-SR MVL-20M-SR
Max. Swing Diameter	mm [inch]	Ø 2,500 [98.42]
Max. Turning Diameter	mm [inch]	Ø 2,500 [98.42]
Height, Table to Clamp Pitch Line	mm [inch]	1,985 [78.15]
Height, Max. Turning (B79 Holder)	mm [inch]	1,810 [71.25]
Max. Workpiece Mass	kg [lb.]	15,000 [33,069]
CONTROLLER AND MOTORS		
CNC Control	-	FANUC 0i-TF Plus
Main Spindle Motor	kW [HP]	55 / 45 [73.7 / 60.3]
X and Z Axis Servo Motors	kW [HP]	7 [9.4] (with 3:1 reduction)
Milling Spindle Motor, -iM & -M only	kW [HP]	22 / 18.5 [29.5 / 25]
Cf Axis Motor, -M only	kW [HP]	7 [9.4] (360:1 reduction)
TABLE		
Table Diameter	mm [inch]	Ø 2,000 [78.74]
Low / High Gear Speed	RPM	0 ~ 45 / 45 ~ 220
Max. Table Torque	Nm. [ft.lb]	40,900 [30,166]
TOOL CHANGER		
Tool Capacity, 2-Axis / -iM & -M	# of Tools	16 / 15+1 Cover
RAM		
Cross Sectional Area	mm [inch]	254 x 254 [10 x 10]
Tooling Attachment Clamp Force	Ton, kN [lb-f]	8-Ton, 77.5 [17,422]
Tooling Attachment Anti Rotation	-	24 Tooth Curvic Coupling
Center Retention Stud Force	kN [lb-f]	20 [4,496]
MILL SPINDLE		
Low / High Gear Steps, -M only	RPM	0 ~ 1570 / 486 ~ 3000
Max. Spindle Torque, -M / -iM	Nm. [ft.lb]	820 [604] / 620 [455]
Milling Tool Type, -M and -iM	-	Dual Contact CAT-50
TRAVELS		
Horizontal Travel, X Axis	mm [inch]	-1,300 ~ 1,500 [-51.18 ~ 59.05]
Vertical Travel, Z Axis	mm [inch]	1,000 [39.37]
Cross Rail Travel, Steps, Positions	mm [inch], #	1,030 [40.55], 4 steps, 5 pos.
FEED RATES		
Rapid Traverse Rate, X and Z Axis	m/min [in/min]	10 [393.7]
Cutting Feed Rate	mm/min [in/min]	1 ~ 2,000 [0.039 ~ 78.74]
COOLANT TANK		
CTS / Flood / Bed Wash Pumps	Bar [PSI], L/min	6 [87] and 100 [26]
Tank Volume	Liters [gallons]	592 [157]
Tank Filtration, Basket / Secondary	um [inch]	1000 [0.040] / 600 [0.024]
FACILITY RELATED		
Required Electrical Power	-	3-Ph 460V ±10%; 60Hz ±1%
Main Breaker Size	-	175 amp, 139 kVA @ 460V
Machine Net Weight	kg [lb.]	54,000 [119,049]